

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/526,109
Source: pcr/10
Date Processed by STIC: 3/9/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 03/09/2005

PATENT APPLICATION: US/10/526,109

TIME: 15:18:24

Input Set : A:\082368-003100US.txt

Output Set: N:\CRF4\03092005\J526109.raw

4 <110> APPLICANT: Egashira, Kensuke
 5 Inoue, Shujiro
 6 AnGes MG, Inc.
 8 <120> TITLE OF INVENTION: NOVEL ACTIN-RELATED CYTOSKELETAL PROTEIN
 9 "LACS"
 11 <130> FILE REFERENCE: 082368-003100US
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/526,109
 C--> 13 <141> CURRENT FILING DATE: 2005-02-28
 13 <150> PRIOR APPLICATION NUMBER: PCT/JP03/03613
 14 <151> PRIOR FILING DATE: 2003-03-25
 16 <150> PRIOR APPLICATION NUMBER: JP 2002-255442
 17 <151> PRIOR FILING DATE: 2002-08-30
 19 <160> NUMBER OF SEQ ID NOS: 2
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 3302
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Rattus rattus
 28 <400> SEQUENCE: 1
 29 Met Ala Arg Tyr Gln Ala Ala Val Ser Arg Gly Asp Thr Arg Ser Phe
 30 1 5 10 15
 31 Ser Ala Asn Val Met Glu Glu Ser Asp Leu Ser Thr Val Pro Gly Gly
 32 20 25 30
 33 Leu Ala Lys Met Lys Arg Gln Phe Glu Lys Asp Glu Met Thr Ser Thr
 34 35 40 45
 35 Cys Asn Ala Phe Ser Glu Tyr Gln Tyr Gln His Glu Ser Arg Ser Glu
 36 50 55 60
 37 Gln Glu Ala Ile His Asn Arg Gln Glu Ile Arg Arg Asn Glu Glu Glu
 38 65 70 75 80
 39 Val Ser Lys Gly His Arg Thr Asp Val Phe Lys Ala Glu Met Met Ser
 40 85 90 95
 41 His Leu Glu Lys His Thr Glu Glu Thr Asn Gln Ala Ser Gln Phe Arg
 42 100 105 110
 43 Gln Tyr Val Gln Glu Thr Val Ile Asp Thr Pro Glu Asp Glu Glu Ile
 44 115 120 125
 45 Pro Lys Val Ser Thr Lys Ile Leu Lys Glu Gln Phe Glu Lys Thr Ala
 46 130 135 140
 47 Gln Glu Asn Phe Leu Tyr Ser Asp Lys Glu Thr Thr Thr Pro Ala Lys
 48 145 150 155 160
 49 Cys Ile Lys Ile Glu Asn Asp Ser Glu Glu Thr Leu Lys Pro Ser Ser
 50 165 170 175
 51 Ala Met Gly Thr Ser Ser Tyr Thr Ser Ala Arg Gln Ser Lys Glu Thr
 52 180 185 190

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53 Ser Thr Ser Ser Tyr Ser Asn His Ser Leu Thr Ser Thr Ile Leu Ala
54      195      200      205
55 Gln Glu Lys Gly Thr Pro Ser Gly Lys Met Glu Glu Phe Pro Pro Pro
56      210      215      220
57 Pro Pro Asp Val Phe Gln Thr Pro Met Asp Val Thr Ala Phe Ser Gln
58 225      230      235      240
59 Ser Pro Glu Phe Pro Ser Pro Pro Arg Arg Leu Pro Met Pro Arg Asp
60      245      250      255
61 Val Tyr Ser Lys Gln Arg Asn Leu Tyr Glu Leu Asn Arg Leu Tyr Arg
62      260      265      270
63 His Ile His Pro Glu Leu Arg Lys Asn Leu Glu Lys Asp Tyr Ile Ser
64      275      280      285
65 Glu Val Ser Glu Ile Val Ser Ser His Ile Asn Ser Gly Asn Ser Ile
66      290      295      300
67 Ser Ala Gly Val Gln Gln Ala Arg Tyr Val Phe Glu Asn Thr Asn Asp
68 305      310      315      320
69 Ser Ser Gln Lys Asp Leu Ser Ser Glu Arg Glu Asn Leu Glu Trp Asp
70      325      330      335
71 Glu Ile Leu Lys Gly Glu Val Gln Ser Ile Arg Trp Ile Phe Glu Asn
72      340      345      350
73 Gln Pro Leu Asp Ser Ile Asn Gln Gly Phe Thr Asp Glu Ala Tyr Thr
74      355      360      365
75 Ser Lys Gly Ile Ala Asp Gln Glu Leu Ile Ala Gly Gly Asp Val Lys
76      370      375      380
77 Tyr Thr Thr Trp Met Phe Glu Thr Gln Pro Ile Asp Ala Leu Gly Val
78 385      390      395      400
79 Pro Ser Ala Gly Thr Glu Glu Asn Thr Glu Lys Ile Pro Glu Leu Ala
80      405      410      415
81 Lys Gly Asp Val Cys Thr Ala Arg Trp Met Phe Glu Thr Arg Pro Leu
82      420      425      430
83 Asp Ser Met Asn Lys Met His Glu Trp Glu Asp Glu Thr Ala Ser Thr
84      435      440      445
85 Phe Ile Lys Asp Ile Thr Gly Gly Asp Val Lys Thr Val Arg Tyr Met
86      450      455      460
87 Phe Glu Thr Gln Gln Leu Asp Gln Leu Gly Gln Leu His Ser Val Asp
88 465      470      475      480
89 Glu Met Asn Leu Leu Gln Leu Arg Ser Glu Leu Lys Glu Ile Lys Gly
90      485      490      495
91 Asn Val Lys Arg Ser Ile Lys Cys Phe Glu Thr Gln Pro Leu Tyr Val
92      500      505      510
93 Ile Arg Asp Gly Ser Gly Gln Met Leu Glu Ile Lys Thr Val Gln Arg
94      515      520      525
95 Glu Asp Ile Glu Lys Gly Asp Val Arg Thr Ala Arg Trp Met Phe Glu
96      530      535      540
97 Thr Gln Pro Leu Asp Thr Ile Lys Gln Asp Ile Thr Glu Ile Lys Val
98 545      550      555      560
99 Val Arg Gly Ile Ser Met Glu Glu Asn Val Lys Gly Glu Val Gly Arg
100      565      570      575
101 Ala Arg Trp Leu Phe Glu Thr Gln Pro Leu Glu Lys Ile Lys Glu Glu

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102          580          585          590
103 Ser Gly Glu Ala Val Leu Lys Thr Glu Ala Val Val Gly Ile Asp Val
104          595          600          605
105 Ser Lys Lys Cys Trp Met Phe Glu Thr Gln Pro Leu Asp Thr Leu Lys
106          610          615          620
107 Gln Ser Pro Asp Thr Glu Ser Val Ser Pro Glu Glu Arg Ile Gly Gly
108 625          630          635          640
109 Asp Val Lys Thr Thr Lys His Leu Leu Glu Thr Leu Pro Ile Glu Ala
110          645          650          655
111 Leu Lys Asp Ser Pro Asp Val Gly Lys Leu Gln Lys Ile Thr Ala Ser
112          660          665          670
113 Glu Glu Glu Lys Gly Asp Val Lys His Gln Lys Trp Val Phe Glu Thr
114          675          680          685
115 Gln Arg Leu Glu Asp Ile Arg Glu Asp Lys Lys Glu Tyr Thr Gln Thr
116          690          695          700
117 Val Lys Leu Glu Ala Val Asp Arg Gly His Val Lys Asn Glu Thr His
118 705          710          715          720
119 Ile Phe Glu Ser Asn Asn Leu Ile Lys Val Asp Ala Ser His Gln Ile
120          725          730          735
121 Glu Val Glu Gly Val Thr Arg Gly Thr Val Glu Leu Asn Lys Ser Leu
122          740          745          750
123 Phe Glu Thr Thr Pro Leu Tyr Ala Ile Gln Asp His Leu Gly Lys Tyr
124          755          760          765
125 His Gln Val Lys Thr Val Gln Gln Glu Glu Ile Val Arg Gly Asp Val
126          770          775          780
127 Arg Ser Cys Arg Trp Leu Phe Glu Thr Arg Pro Ile Asp Gln Phe Asp
128 785          790          795          800
129 Glu Ser Leu His Lys Phe Gln Ile Ile Arg Gly Ile Ser Ala Gln Glu
130          805          810          815
131 Ile Gln Ala Gly Asn Val Lys Ser Ala Arg Trp Leu Phe Glu Thr Gln
132          820          825          830
133 Pro Leu Asp Ser Ile Lys Tyr Phe Ser Asn Val Glu Glu Thr Asp Ser
134          835          840          845
135 Lys Thr Glu Gln Ser Thr Asp Ile Val Lys Gly Asp Val Lys Thr Cys
136          850          855          860
137 Lys Trp Leu Phe Glu Thr Gln Pro Met Glu Ser Leu Tyr Glu Lys Ala
138 865          870          875          880
139 Ser Leu Met Thr Asn Ser Glu Asp Ile His Lys Gly Asp Val Arg Thr
140          885          890          895
141 Cys Met Trp Leu Phe Glu Thr Gln Pro Leu Asp Ala Ile Lys Asn Asp
142          900          905          910
143 Ser Glu Ala Thr Val Lys Leu Gln Thr Val Lys Gln Glu Glu Ile Gln
144          915          920          925
145 Gly Gly Asp Val Arg Thr Ala Cys Leu Leu Phe Glu Thr Glu Asn Leu
146          930          935          940
147 Asp Asn Ile Gln Gly Gly Glu Gly Lys Glu Thr Lys Pro Val Glu Met
148 945          950          955          960
149 Asp Ile Glu Ser Gly Asp Val Ser Gly Met Lys Tyr Lys Phe Glu Asn
150          965          970          975

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```

151 Gln Ser Leu Asp Ser Ile Ser Cys Ser Ser Glu Asn Val Leu Asn Lys
152          980          985          990
153 Ile Lys Thr Leu Lys Ile Glu Asp Ile Gln Lys Gly Asn Val Leu Asn
154          995          1000          1005
155 Cys Arg Trp Leu Phe Glu Asn Gln Pro Ile Asp Met Ile Lys Glu Asn
156          1010          1015          1020
157 Gln Glu Gly Asp Gly Leu Val Lys Thr Val Thr Asp Ile Gln Gly Gly
158 1025          1030          1035          1040
159 Asp Val Arg Lys Gly Cys Phe Ile Phe Glu Thr Phe Ser Leu Asp Glu
160          1045          1050          1055
161 Ile Lys Asp Glu Ser Asp Val Ile Ser Thr Arg Gln Thr Asn Thr Glu
162          1060          1065          1070
163 Glu Val Ile Lys Gly Asp Val Lys Ser Tyr Lys Met Leu Phe Glu Thr
164          1075          1080          1085
165 Gln Pro Leu Tyr Ala Ile Gln Asp Gln Glu Gly Phe Tyr His Glu Val
166          1090          1095          1100
167 Thr Thr Val Lys Lys Glu Glu Thr Ile His Gly Asp Val Arg Gly Thr
168 1105          1110          1115          1120
169 Arg Trp Leu Phe Glu Thr Lys Pro Leu Asp Ser Ile Asn Ala Ser Glu
170          1125          1130          1135
171 Asp Val Tyr Ile Ile Lys Ser Val Thr Gln Glu Asp Ile Gln Lys Gly
172          1140          1145          1150
173 Asp Val Ser Ser Val Arg Tyr Arg Phe Glu Thr Gln Pro Leu Asp Met
174          1155          1160          1165
175 Ile Ser Asp Lys Ser His Asn Ile Met Pro Thr Ile Asp His Ile Gln
176          1170          1175          1180
177 Gly Gly Asn Val Gln Met Asn Lys Gln Leu Phe Glu Ser Glu Gly Gly
178 1185          1190          1195          1200
179 Asp Lys Lys Asn Tyr Val Arg Thr Val Ser Ile Asn Glu Ile Gln Lys
180          1205          1210          1215
181 Gly Asn Val Lys Thr Ser Thr Trp Leu Phe Glu Thr His Ser Ile Asp
182          1220          1225          1230
183 Glu Leu Gly Glu Val Ser Thr Tyr Glu Asn Ile Lys Thr Val Thr Gln
184          1235          1240          1245
185 Glu Asp Val Gln Lys Gly Asp Val Lys Gln Ala Val Trp Leu Phe Glu
186          1250          1255          1260
187 Asn Gln Thr Leu Asp Ser Ile Lys Glu Leu Asp Glu Ser Asp Thr Lys
188 1265          1270          1275          1280
189 Ile Thr Lys Glu Glu Ile Pro Pro Ser Asp Val Lys Thr Thr Thr Trp
190          1285          1290          1295
191 Leu Phe Glu Thr Thr Pro Ile His Glu Phe Asn Glu Thr Arg Ile Glu
192          1300          1305          1310
193 Lys Glu Glu Ile Ile Gly Lys Ser Ile Lys Glu Thr Leu Glu Asp Leu
194          1315          1320          1325
195 Tyr Ser Gln Arg Val Val Glu Ala Pro Gly Ile Ile Ile Glu Ala Asp
196          1330          1335          1340
197 Glu Val Gly Asp Val Arg Met Ala Lys Tyr Lys Leu Met Asn Gln Arg
198 1345          1350          1355          1360
199 Thr Pro Glu Ile Gln Lys Glu Glu Val Ile Arg Ala Asp Leu Gly Asn

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200          1365          1370          1375
201 Ile Met Met Asn Leu Leu Ser Gln Arg Asp Cys Thr Lys Lys Glu Ile
202          1380          1385          1390
203 Phe Ile Ser Glu Glu Glu Lys Gly Asn Val Asn Phe Thr Lys Thr Gln
204          1395          1400          1405
205 Leu Leu Asn Arg Ser Met Glu Phe His Ala Glu Lys Glu Glu Ile Val
206          1410          1415          1420
207 Arg Gly Asp Val Lys Gln Ala Ile Gln Lys Leu Phe Ser Glu Glu Arg
208 1425          1430          1435          1440
209 Cys Ala Lys Arg Gly Ile Leu Ile Gln Glu Asp Glu Lys Gly Asp Val
210          1445          1450          1455
211 Asn Met Thr Ile Tyr Cys Leu Leu His Glu Asn Ala Gly Asp Lys Thr
212          1460          1465          1470
213 Lys Arg Glu Asp Ile Leu Gly Gly Asp Val Arg Arg Thr Ile His Asn
214          1475          1480          1485
215 Leu Leu Ser Ser Ala Ser Asn Asp Lys Ile Ser Glu Arg Thr Lys Ile
216          1490          1495          1500
217 Asp Ala Ser Glu Arg Gly Asn Val Gln Phe Phe Thr Thr Cys Ile Glu
218 1505          1510          1515          1520
219 Thr Gly Ala Leu Asp Tyr Leu Lys Gln Leu Gln Thr Gly Ser Asn Glu
220          1525          1530          1535
221 Thr Leu Thr Ala Arg Lys Gln Glu Gly Glu Glu Glu Ile Ile Gly Gly
222          1540          1545          1550
223 Asp Val Glu Gly Thr Lys Phe Leu Leu Lys Lys Arg Gln Ser Ser Ile
224          1555          1560          1565
225 Glu Arg Thr Val Ser Glu Thr Asp Ile Ile Pro Gly Asp Val Arg Asn
226          1570          1575          1580
227 Thr Val Lys Val Phe Met Thr Glu Pro Gln Ser Ala Ser Phe Lys Thr
228 1585          1590          1595          1600
229 Ala Lys Glu Glu Ile Val Lys Gly Asp Leu Lys Ser Thr Leu Asn Ser
230          1605          1610          1615
231 Leu Asn Gln Ala Met Asn Gln Lys Val Val Ala Lys Thr Glu Asp Ile
232          1620          1625          1630
233 Met Lys Asp Asp Lys Ala Ala Ile Leu Lys Ser Leu Lys Glu Ser Gly
234          1635          1640          1645
235 Gly Arg Gln Lys Glu His Lys Gln Ser Ala Ser Ile Ser Ser Asp Ile
236          1650          1655          1660
237 Gly Gln Ala Ile Glu Cys Leu Glu Lys Ala Thr Asn Thr Arg Thr Glu
238 1665          1670          1675          1680
239 Ile Leu Lys Lys Glu Leu Ile Leu Asp Asp Leu Lys Thr Ser Leu Arg
240          1685          1690          1695
241 Ser Leu Lys Glu Glu Gln Tyr Ser Phe Lys Glu Val Gly Lys Gln Gly
242          1700          1705          1710
243 Met Val Lys Asp Val Leu Gly Phe Ser Glu Arg Gln Glu Leu Gly Ile
244          1715          1720          1725
245 His Pro Ala Ala Val Gln Arg Glu Lys Lys Ser Leu Leu Gln Pro Val
246          1730          1735          1740
247 Pro Gly Pro Cys Glu Pro Ala Ile Arg Gln Gln Ala Gly Pro Gly Pro
248 1745          1750          1755          1760

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/526,109

DATE: 03/09/2005

TIME: 15:18:25

Input Set : A:\082368-003100US.txt

Output Set: N:\CRF4\03092005\J526109.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date